Clinical Characteristics of Late-Onset Spondyloarthritides. KY Anishchenko (MD, GS), E Cheng, L Caplan, Rocky Mountain VAMC, Denver, CO.

Purpose: Spondyloarthritides are a group of inflammatory rheumatic diseases with a global prevalence of 1%. Early and late-onset SpA are considered pathologically similar, but small observational studies suggest that they present with different clinical characteristics. Further, few research studies have quantified the effectiveness of tumor necrosis factor inhibitor (TNFi) therapy in late-onset SpA. This study examined the clinical differences and reasons for TNFi discontinuation in early-onset (EOSpA) and late-onset SpA (LOSpA).

Methods: US veterans enrolled in the Program to Understand the Longterm Outcomes in Spondyloarthritis from 2007 – 2019 who were diagnosed with ankylosing spondylitis, psoriatic arthritis, reactive arthritis, undifferentiated spondyloarthritis, or IBD-associated arthritis were included. LOSpA was defined as symptom onset beginning after age 50.

Summary: 115 individuals with LOSpA and 136 TNFi courses were compared to 424 individuals with EOSpA and 498 TNFi courses. The mean age of enrollment was 65.73 for the late-onset group and 51.86 for the early-onset group. Significantly more patients with EOSpA were human-leukocyte antigen B27 positive ($P<0.01$). The most common reason for TNFi discontinuation was secondary failure (42% EOSpA, 36% LOSpA), defined as loss of efficacy after >6 months of treatment, followed by adverse events (23% EoSpA, 27% LoSpA).

Conclusions: This study suggests that late-onset SpA patients have a lower frequency of HLA B27 and similar reasons for TNFi discontinuation as early-onset patients. In contrast to prior studies, use of the data of symptom onset, rather than the date of diagnosis, likely resulted in a more accurate classification of cases. Further studies should evaluate clinical outcomes in LoSpA patients to better quantify the effectiveness of treatments for this population.